UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,979	03/13/2001	Jiro Ebihara	P 277940 55769-US-SuS/nh	9381

7590 03/07/2002

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER
PEREZ, GUILLERMO

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 03/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/803,979	EBIHARA ET AL.	
	Examiner	Art Unit	
	Guillermo Perez	2834	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) *6* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Newly submitted claim 6 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 6 and 1-5 are related as process of making (class 29; subclass 598) and product made (class 310; subclass 233). The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the anchoring portion can be made by cutting the laminations of the central portion of the armature to leave only two laminations acting as the anchors, at the ends of the armature.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for claims 1-5 is not required for claim 6, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 6 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushita et al. (EP 0863600).

Matsushita et al. disclose an armature of a rotary electric machine comprising:

a rotary shaft (7);

an armature core (8) composed of a plurality of laminated sheets through which the shaft (7) is inserted and a plurality of slots at the outer periphery thereof;

an armature coil (16) composed of a plurality of conductor segments having in-slot portions being respectively inserted into the slots; and

a commutator (10) integrated with the armature coil (16) at an end thereof;

wherein

the armature core (8) comprises an anchoring portion (11 in figure 9) formed by a portion of the laminated sheets near the commutator (10) for anchoring a part of each of the in-slot portions that correspond to the portion of the laminated sheets to the armature core (8). However, Matsushita et al. do not disclose that the anchoring portion is formed by pressing.

Referring to claim 1, no patentable weight has been given to the method of manufacturing limitations (i. e. "formed by pressing") since "even though product-by-

process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe,* 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

2. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushita et al. in view of Pryjmak (U. S. Pat. 4,616,151).

Matsushita et al. disclose an armature as described on item 1 above. However, Matsushita et al. do not disclose that the anchoring portion is disposed at a distance less than a half of the length of the armature core from an end thereof adjacent to the commutator. Matsushita et al. do not disclose that the anchoring portion is disposed at least a space corresponding to one of the laminated sheet apart from the end adjacent to the commutator.

Pryjmak discloses that the anchoring portion (32) is disposed at a distance less than a half of the length of the armature core (10) from an end thereof adjacent to the commutator (the commutator as viewed in Matsushita et al.). Pryjmak discloses that that the anchoring portion (32) is disposed at least a space corresponding to one of the laminated sheet (21-27) apart from the end adjacent to the commutator. Pryjmak's invention has the purpose of reducing the excitation of resonant case vibration modes to produce a quieter motor operation.

It would have been obvious at the time the invention was made to modify the armature of Matsushita et al. and Pryjmak and provide it with the anchoring configuration disclosed by Pryjmak for the purpose of reducing the excitation of resonant case vibration modes to produce a quieter motor operation.

3. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushita et al. in view of Akira (JP 62247736).

Matsushita et al. disclose an armature as described on item 1 above. However, Matsushita et al. do not disclose that the anchoring portion comprises a belt-like pressed portion of the armature core. Matsushita et al. do not disclose that the pressed portion has an outside diameter less than the outside diameter of the rest of the armature core.

Akira discloses that the anchoring portion (32) comprises a belt-like pressed portion of the armature core (1). Akira discloses that that the pressed portion (3) has an outside diameter less than the outside diameter of the rest of the armature core (1). Akira's invention has the purpose of preventing the coil from jumping out easily.

It would have been obvious at the time the invention was made to modify the armature of Matsushita et al. and provide it with the belt-like pressed configuration disclosed Akira for the purpose of preventing the coil from jumping out easily.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the pressed portion with an outside diameter 0. 08% - 0.6 less than the outside diameter of the rest of the armature since it has been held that where the general conditions of a claim are disclosed in the prior art, it is not inventive

to discover the optimum or workable ranges by routine experimentation. *In re Aller,* 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Response to Arguments

Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308 1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Guillermo Perez
March 4, 2002

NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800